Index to Volume 73

The Journal of Heredity, 1982

Aberrant egg development from matings of interchange heterozygotes of the German cockroach, M. H. Ross and G.-C. Nguyen-Tan, 154.

Additional mechanism by which B chromosomes are maintained in maize, J. B. Beckett, 29.

Akhtar, K., et al., Linkage group III in the malaria vector, *Anopheles stephensi*, 473.

Alahiotis, S. N. and G. Kilias, Mating propensities and variations in enzyme activities in long-term cage populations of *Drosophila melanogaster*, 53.

Allard, R. W., et al., Cryptic variability of enzyme loci in three plant species, *Avena barbata*, *Hordeum vulgare*, and *Zea mays*, 86; corrigendum, 388.

Allen, S. K., Jr., et al., Induced triploidy in the soft-shell clam: cytogenetic and allozymic confirmation, 421.

Allozyme heterozygosity and growth in the tiger salamander, *Ambystoma tigrinum*, B. A. Pierce and J. B. Mitton, 250.

Andersson, L. and K. Sandberg, A linkage group composed of three coat color genes and three serum protein loci in horses, 91; corrigendum, 296.

Animal Genetics

Akodon mollis: chiasmatic sex bivalent in male meiosis, 149.

Bee: laranja—an additional eye color gene in snow series of *Apis mellifera* L., 80.

Boll weevil: meiotic chromosomes, 234.

Cattle: collagen substrates for cytogenetic studies of embryos, 147. detailed description of R-banded bovine chromosomes, 434; association patterns in chromosomes, 468.

Clam: induced triploidy in soft-shell, *Mya arenaria*, 421.

Cockroach: aberrant egg development from matings of interchange heterozygotes of German, 154; behavior of centrioles in spermatogenesis of Madagascar hissing, 408.

Dog: nucleolus organizer regions on chromosomes, 73; corrigendum, 230.

Drosophila: transposable elements controlling gentic instabilities, 12; populations selected for resistance to NaCl and $CuSO_4$ in both allopatry and sympatry in *D. melanogaster* 35; mating propensities and variations in enzyme activities in long-term cage populations of *D. melanogaster*, 53; increase of phenotypic variance in stressful environments in *D. pseudoobscura*, 142; premeiotic male recombination in *D. melanogaster*, 330; effects of selection for decreased movement through the geotaxis maze, 381; effect of hyperthermia on radiation-induced chromosome loss in female *D. melanogaster*, 451.

Fish: linkage analysis of seventeen loci in poeciliid, 19; diethylnitrosamine-induced hepatic tumors in wild vs. inbred strains of viviparous, 43; linkage of guanylate kinase-2 (GUK2) and glyceraldehyde-3-phosphate dehydrogenase-1 (GAPD1) designed as linkage group III in *Xiphophorus*, 163; genetic estimates for length and weight of coho salmon during freshwater rearing, 187; inheritance of shoulder spotting in the jewel tetra, *Hyphessobrycon callistus*, 310.

Fowl: missing upper beak, a new lethal mutation in domestic, 295.

Frogs: linkage analysis of the transferrin, albumin, and hemoglobin loci in leopard, 247; gene dosage effects on MDH isozyme expression in diploid, triploid, and tetraploid *Hyla* species, 277.

Gaur: inbreeding, mortality, and sex ratio in *Bos gaurus* under captivity, 297.

Hamsters: major plasma glycoproteins of diabetic and nondiabetic Chinese, 311; assignment of ADA, ITPA, AK1, and AK2 tc chromosomes: genetic and structural evidence for the conservation of mammalian autosomal synteny, 399.

Horses: linkage group composed of three coat color genes and three serum protein loci, 91; corrigendum, 296; inheritance of leopard spotting in the Noriker, 357.

Housefly: mapping of *Pgd*, coding enzyme 6PGD, in linkage group III of *Musca domestica*, 349.

Mammals: transposable elements controlling genetic instabilities, 12; cytogenetic consequences of microwave irradiation on cells incubated in vitro, 133; parthenogenesis, homozygosity, and cloning, 390.

Mice: transposable elements controlling genetic instabilities, 12; genetic regulation of murine hepatic arylsulfatase B activity during development, 24; blonde mutation in *Peromyscus maniculatus* affecting fur, skin, and eye pigmentation, 69; mutagenic evaluation of two male contraceptives; 5-thio-D-glucose and gossypol acetic acid, 76; morphometric studies in inbred and hybrid house mice: 171, 267; sphingomyelinosis, a model of Niemann-Pick disease in humans, 257; deficient corpus callosum, 281; differences in development of perinotochordal sheath in heterozygous and homozygous Danforth's short-tail, 299; meiotic nondisjunction in male Snell dwarf, 365; effects of fostering in selected strains, 375.

Mosquitoes: cladistic analysis of chromosome data in *Anopheles* species, 3; genetic analysis of abnormal male sexual development in *Aedes aegypti* and *Ae. mascarensis* backcross progeny, 59; genetic and linkage analyses of an alpha and beta esterase polymorphism in *Anopheles culicifacies*, 209; isolation of sex-linked homozygous translocation in *An. albimanus*, 273; linkage of an IDH locus with sex and two lethals in *Aedes aegypti*, 291; genetics of yellow and green body color mutants in *An. culicifacies*, 340; linkage group III in *Anopheles stephensi*, 473.

Rabbits: ascorbate concentration in tissues from normal and buphthalmic, 109; collagen substrates for cytological studies of embryos, 147; serum lipoprotein allotypes in inbred strains, 286; hyperplastic growth in skin grafts, 304; vitamin A, beta carotene, and hereditary buphthalmus, 370.

Rats: relationships among laboratory colonies, 81; male urinary protein-1 (*Mup-1*) assigned to linkage group II, 119.

Salamander: allozyme heterozygosity and growth in *Ambystoma tigrinum*, 250.

Sheep: blood group comparisons between European mouflon and North American desert bighorn, 112.

Swine: collagen substrates for cytogenetic studies of embryos, 147; constitutive heterochromatin of porcine chromosomes, 231; sexes within uterine horns of piglets, 378.

Whooping crane: genome of *Grus americana*, 145.

Antlfinger, A. E., Genetic neighborhood structure of the salt marsh composite, *Borrichia frutescens*, 128.

Argenteum (*Arg*) mutant of *Pisum:* genetic control and breeding behavior, G. A. Marx, 413.

Arisumi, T., Endosperm balance numbers among New Guinea-Indonesian *Impatiens* species, 240.

Ascher, P. D. and C. D. Robacker, Nonrandom transmission of the *S* gene in *Nemesia strumosa*, 439.

Ascher, P. D., et al., Genetic control of self-incompatibility in red-osier dogwood, 308.

Ascorbate concentration in tissues from normal and buphthalmic rabbits, R. R. Fox, K.-W. Lam, R. Lewen, and P.-F. Lee, 109.

Assignment of ADA, ITPA, AK1, and AK2 to Chinese hamster chromosomes: genetic and structural evidence for the conservation of mammalian autosomal synteny, R. L. Stallings and M. J. Siciliano, 399.

Association patterns in cattle chromosomes, B. Mayr and W. Schleger, 468.

Axtell, J. D., et al., Inheritance of tannin quantity in sorghum, 214.

Baker, L. R., et al., Cytogenetic analysis of the interspecific hybrid *Vigna radiata* × *V. umbellata*, 205.
Baker, R. H., et al.: Esterases in the malaria vector mosquito, *Anopheles culicifacies:* genetic and linkage analyses of an alpha and beta polymorphism, 209; Two new body color mutants in the mosquito: the genetics of yellow and green in *Anopheles culicifacies*, 340; Linkage group III in the malaria vector, *Anopheles stephensi*, 473.
Banks, P., et al., Heritable para-fluorophenylalanine-induced aneuploidy in maize, 465.
Baum, J. A. and J. G. Scandalios, Multiple genes controlling superoxide dismutase expression in maize, 95.
Beckett, J. B., An additional mechanism by which B chromosomes are maintained in maize, 29.
Behavior of centrioles in spermatogenesis of the Madagascar hissing cockroach, L. Shi, T. C. Hsu, S. Pathak, and T. A. Granovsky, 408.
Benedict, M. Q., et al., Isolation of a sex-linked homozygous translocation in *Anopheles albimanus*, 273.
Bianchi, N. O., et al., Cytogenetics of the south American akodont rodents (Cricetidae): IX. Chiasmatic sex bivalent in male meiosis of *Akodon mollis*, 149.
Bias in estimation of the sampling variance of an estimate of heritability, E. M. Funkhouser and M. Grossman, 139.
Biederman, B. M., et al.: Genome of the whooping crane, 145; The constitutive heterochromatin of porcine chromosomes, 231.
Blonde, a new mutation in *Peromyscus maniculatus* affecting fur, skin, and eye pigmentation, B. M. Pratt and R. J. Robbins, 69.
Blood group comparisons between European mouflon sheep and North American desert bighorn sheep, T. D. Bunch and T. C. Nguyen, 112.
Bogart, J. P. and R. G. Danzmann, Gene dosage effects on MDH isozyme expression in diploid, triploid, and tetraploid treefrogs of the genus *Hyla*, 277.

Books Reviewed

Animal Genetics, Second ed. Frederick B. Hutt and Benjamin A. Rasmusen, 387.
Genes, Radiation, and Society: The Life and work of H. J. Muller. Elof Axel Carlson, 477.
Genetics and Probability in Animal Breeding Experiments. Earl L. Green, 83.
Genetic Variants and Strains of the Laboratory Mouse. Margaret C. Green, Ed., 313; corrigendum, 388.
Identical Twins Reared Apart: a Reanalysis. Susan L. Farber, 315.
Mammalian Genetics and Cancer: The Jackson Laboratory Fiftieth Anniversary Symposium. Elizabeth S. Russell, Ed., 83; corrigendum, 230.
Preparation of the Normal Giemsa-Trypsin Banded Karyotype. B. J. Kaplan and L. A. Evans, 387.
Quantitative Genetics in Maize Breeding, A. R. Hallauer and J. B. Miranda, 315.
The Evolutionary Synthesis-Perspectives on the Unification of Biology. Ernst Mayr and William B. Provine, Eds., 314.
The Scientific Heritage: Vol. 5, Nikolai Ivanovich Vavilov. V. D. Esakov, Ed.
The Testament of Gavriil Zaitsev. Samuel E. Reznik, 316.
Twin Research 3., Vol. 69, Progress in Clinical and Biological Research. L. Gedda, P. Parisi, and W. E. Nance, Eds. 477.

Boscher, J., et al., Collagen substrates for cytogenetic studies of domestic animal embryos, 147.
Bouwkamp, J. C. and W. L. Summers, Inheritance of resistance to temperature-drought stress in the snap bean, 385.
Branch, W. D., et al., Inheritance of a white-stem peanut, 301.
Brat, S. V., et al., A rapid method for identification of constitutive heterochromatin of secondary constriction regions of human chromosomes 1, 9, and 16, 74.
Britten, E. J., et al., Heritable para-fluorophenylalanine-induced aneuploidy in maize, 465.
Browers, M. A. and T. J. Orton, Transmission of gross chromosomal variability from suspension cultures into regenerated celery plants, 159.
Bunch, T. D. and T. C. Nguyen, Blood group comparisons between European mouflon sheep and North American desert bighorn sheep, 112.
Burla H. and C. E. Taylor, Increase of phenotypic variance in stressful environments, 142.
Burns, J. A., The chromosomes of *Nicotiana africana* Merxm.: a recently discovered species, 115.
Butler, L. G., et al., Inheritance of tannin quantity in sorghum, 214.
Byth, D. E., et al., Heritable para-fluorophenylalanine-induced aneuploidy in maize, 465.

Cantrell, R. P., et al., Inheritance of tannin quantity in sorghum, 214.
Carlson, P. S., et al., Uptake of isolated lily chromosomes by tobacco protoplasts, 151.
Center, E. M., et al., Perinotochordal sheath of heterozygous and homozygous Danforth's short-tail mice, 299.
Chai, C. K., Hyperplastic growth in skin grafts of rabbits, 304.
Changes in patterns of inheritance of flowering time of dry beans in different environments, H. K. Leyna, S. S. Korban, and D. P. Coyne, 306.
Chen, C.-C., et al., Genetic analysis of anther-derived plants of rice, 49.
Chen, C.-M., et al., Genetic analysis of anther-derived plants of rice, 49.
Chromosome banding and karyotype analysis in *Phlox drummondii*, R. C. Mehra and T. A. Fogle, 345.
Chromosome banding techniques, R. S. Verma (Rev.), 387.
Chromosomes of *Nicotiana africana* Merxm.: a recently discovered species, J. A. Burns, 115.
Citrus isozymes: genetics and distinguishing nucellar from zygotic seedlings, A. M. Torres, R. K. Soost, T. Mau-Lastovicka, 335.
Cladistic analysis of mosquito chromosome data (*Anopheles* (*Cellia*) Myzomyia), C. A. Green, 3.
Clinical significance of pericentric inversion of the human Y chromosome: a rare "third" type of heteromorphism, R. S. Verma, J. Rodriguez, and H. Dosik, 236.
Cohen, B. M.: Recent Soviet publications (Rev.), 316; H. J. Muller: A memoir (Rev.), 477.
Collagen substrates for cytogenetic studies of domestic animal embryos, C. P. Popescu, J. Boscher, and E. P. Cribiu, 147.
Collins, G. B. and G. A. Moore, Isolation of nullihaploids from diverse genotypes of *Nicotiana tabacum*, 192.
Constitutive heterochromatin of porcine chromosomes, C. C. Lin, E. Joyce, B. M. Biederman, and S. Gerhart, 231.
Cooper, D. B., et al., Sequences of purothionins and their inheritance in diploid, tetraploid, and hexaploid wheats, 143.
Copeland, E. J. and L. C. Ginsberg, Major plasma glycoproteins of diabetic and nondiabetic Chinese hamsters, 311.
Corcos, A. F., Ideas on heredity among the Australian aborigines and Trobian Islanders, 298.
Corrigenda: Genetics of the *Akp-2* locus for alkaline phosphatase of liver, kidney, bone, and placenta in the mouse, 141; Role of nucleolar chromosomes in anther-restoration of male-sterile tobacco, 141; Mammalian Genetics and Cancer: The Jackson Laboratory Fiftieth Anniversary Symposium, (Rev.), 230; Genetic interpretation of malate dehydrogenase isozymes in some conifer species, 230; Nucleolus organizer regions on chromosomes of the domestic dog, 230; A linkage group composed of three coat color genes and three serum protein loci in horses, 296; Genetic Variants and Strains of the Laboratory Mouse, (Rev.), 388; Cryptic variability at enzyme loci in three plant species, *Avena barbata*, *Hordeum vulgare*, and *Zea Mays*, 388; Evaluation of cytoplasmic segregation in somatic hybrids of *Nicotiana:* tentoxin sensitivity, 388.
Coyne, D. P., et al., Changes in patterns of inheritance of flowering time of dry beans in different environments, 306.
Crary, D. D., et al., Vitamin A, beta carotene, and hereditary buphthalmus in the rabbit, 370.
Crawford, R. D., et al., Missing upper beak: a new lethal mutation in domestic fowl, 295.
Cribiu, E. P., et al., Collagen substrates for cytogenetic studies of domestic animal embryos, 147.
Crinkle-yellow, a new mutant in *Gossypium hirsutum* L., R. J. Kohel, 382.
Cryptic variability at enzyme loci in three plant species, *Avena barbata*, *Hordeum vulgare*, and *Zea mays*, K. M. Shumaker, R. W. Allard, and A. L. Kahler, 86; corrigendum, 388.
Cutrone, A., et al., Mutagenic evaluation of two male contraceptives: 5-thio-D-glucose and gossypol acetic acid, 76.
Cytogenetic analysis of the interspecific hybrid *Vigna radiata* × *V. Umbellata*, M. Machado, W. Tai, and L. R. Baker, 205.
Cytogenetic consequences of microwave irradiation on mammalian cells incubated in vitro, K. T. S. Yao, 133.
Cytogenetics of hybrids of *Elymus canadensis* × *Hordeum vulgare*, A. Mujeeb-Kazi and R. Rodriguez, 77.
Cytogenetics of the South American akodont rodents (Cricetidae): IX. Chiasmatic sex bivalent in male meiosis of *Akodon mollis*, C. Semino, D. Oliveira, N. O. Bianchi, and L. Lobato, 149.

Daniel, W. L., et al., Genetic regulation of murine hepatic arylsulfatase B activity during development, 24.

Danzmann R. G. and J. P. Bogart, Gene dosage effects on MDH isozyme expression in diploid, triploid, and tetraploid treefrogs of the genus *Hyla*, 277.
Delannay, X. and R. G. Palmer, Genetics and cytology of the *ms*$_4$ male-sterile soybean, 219.
Dennis, E. H., et al., Mutagenic evaluation of two male contraceptives: 5-thio-D-glucose and gossypol acetic acid, 76.
Design and analysis of breeding experiments, J. E. Womack (Rev.), 83.
Detailed description of R-banded bovine chromosomes, D. Di Berardino and L. Iannuzzi, 434.
Dewees, A. A., Premeiotic male recombination in *Drosophila melanogaster*, 330.
Di Berardino, D. and L. Iannuzzi, Detailed description of R-banded bovine chromosomes, 434.
Diethylnitrosamine-induced hepatic tumors in wild vs. inbred strains of a viviparous fish, M. E. Schultz and R. J. Schultz, 43.
2,4-D induced clastogenicity and elevated rates of sister chromatid exchanges in cultured human lymphocytes, C. Korte and S. M. Jalal, 224.
Dosik, H., et al.: A rapid method for identification of constitutive heterochromatin of secondary constriction regions of human chromosomes 1, 9, and 16, 74; The clinical significance of pericentric inversion of the human Y chromosome: a rare "third" type of heteromorphism, 236.
Drewien, R. C., et al., Genome of the whooping crane, 145.
Drewry, A., G-banded chromosomes in *Pinus resinosa*, 305.
Drosophila melanogaster populations selected for resistance to NaCl and $CuSO_4$ in both allopatry and sympatry, B. Wallace, 35.
Dubash, C. J., et al.: Esterases in the malaria vector mosquito, *Anopheles culicifacies:* genetic and linkage analyses of an alpha and beta polymorphism, 209; Two new body color mutants in the mosquito: the genetics of yellow and green in *Anopheles culicifacies*, 340.
Dunlap, D. G., Linkage analysis of the transferrin, albumin, and hemoglobin loci in leopard frogs, 247.
Dwarf curly leaf tomato mutant, M. H. Yu, 470.

Eaton, H. D., et al., Vitamin A, beta carotene, and hereditary buphthalmus in the rabbit, 370.
Eckhardt, R. B., Evolutionary synthesis (Rev.), 314.
Effect of hyperthermia on radiation-induced chromosome loss in female *Drosophila melanogaster*, S. Mittler, 451.
Effects of selection for decreased movement through the *Drosophila* geotaxis maze, S. Kessler, R. F. Rockwell, and L. Levine, 381.
Endosperm balance numbers among New Guinea-Indonesian *Impatiens* species, T. Arisumi, 240.
Endrizzi, J.E. and D. T. Ray, A tester-set of translocations in *Gossypium hirsutum* L., 429.
Esterases in the malaria vector mosquito, *Anopheles culicifacies:* genetic and linkage analyses of an alpha and beta polymorphism, C. J. Dubash, R. K. Sakai, and R. H. Baker, 209.
Evaluation of cytoplasmic segregation in somatic hybrids of *Nicotiana:* tentoxin sensitivity, C. E. Flick and D. A. Evans, 264; corrigendum, 388.
Evans, D. A. and C. E. Flick, Evaluation of cytoplasmic segregation in somatic hybrids of *Nicotiana:* tentoxin sensitivity, 264; corrigendum, 388.
Evolution and improvement of cultivated amaranths: IX. Cytogenetic relationship between the two basic chromosome numbers, M. Pal, R. M. Pandey, and T. N. Khoshoo, 353.
Evolutionary synthesis, R. B. Eckhardt (Rev.), 314.

Faludi-Daniel, A. and D. S. Robertson, Tests establishing the genetic relationship between carotenoid biosynthetic mutants of maize studied in Hungary and the United States, 473.
Fernández, A., et al., Genetic studies in diploid and tetraploid *Paspalum* species: embryo sac development, chromosome behavior, and fertility in *P. cromyorrhizon*, *P. laxum*, and *P. proliferum*, 254.
Festing, M. F. W. and D. P. Lovell, Relationships among colonies of the laboratory rat, 81.
Flick, C. E. and D. A. Evans, Evaluation of cytoplasmic segregation in somatic hybrids of *Nicotiana:* tentoxin sensitivity, 264; corrigendum, 388.
Fogle, T. A. and R. C. Mehra, Chromosome banding and karyotype analysis in *Phlox drummondii*, 345.
Foose, T. J. and R. L. Hintz, Inbreeding, mortality, and sex ratio in gaur (*Bos gaurus*) under captivity, 297.
Forsthoefel, P. F., Mammalian genetics: mouse and man (Rev.), 83; corrigendum, 230.
FORTRAN computer program for calculating linkage intensities from F_2 data, D. K. Shortess, 70.
Fox, R. R., et al.: Ascorbate concentration in tissues from normal and buphthalmic rabbits, 109; Serum lipoprotein allotypes in inbred strains of rabbits, 286; Vitamin A, beta carotene, and hereditary buphthalmus in the rabbit, 370.
Franckowiak, J. D., et al., Interspecific *Hordeum* hybrids, 475.
Frankel, J. S., Inheritance of shoulder spotting in the jewel tetra, *Hyphessobrycon callistus*, 310.
Funkhouser, E. M. and M. Grossman, Bias in estimation of the sampling variance of an estimate of heritability, 139.

Gagnon, P. S., et al., Induced triploidy in the soft-shell clam: cytogenetic and allozymic confirmation, 421.
Galinat, W. C. and C. V. Pasupuleti, *Zea diploperennis:* I. Its chromosomes and comparative cytology, 168.
Gasperi, G., et al., 6PGD in the housefly: mapping of the *Pgd* locus in linkage group III of *Musca domestica*, 349.
G-banded chromosomes in *Pinus resinosa*, A. Drewry, 305.
Gene dosage effects on MDH isozyme expression in diploid, triploid, and tetraploid treefrogs of the genus *Hyla*, R. G. Danzmann and J. P. Bogart, 277.

General Genetics

Bias in estimation of the sampling variance of an estimate of heritability, 139.
Chives (*Allium shoenoprassum*) is useful plant for teaching meiosis, 379.
FORTRAN computer program: calculating linkage intensities from F_2 data, 70.
Simple segregation analysis: a review of its history and terminology, 444.
Teaching cytogenetics: *Ornithogalum virens* is useful plant for teaching cytology, 243.

Genetic analysis of abnormal male sexual development in *Aedes aegypti* and *Ae. mascarensis* backcross progeny, L. R. Hilburn and K. S. Rai, 59.
Genetic analysis of anther-derived plants of rice, C.-M. Chen, C.-C. Chen, and M.-H. Lin, 49.
Genetic control of isozyme variation in *Camellia japonica* L., J. F. Wendel and C. R. Parks, 197.
Genetic control of self-incompatibility in red-osier dogwood, R. L. Hummel, P. D. Ascher, and H. M. Pellett, 308.
Genetic estimates for length and weight of coho salmon during freshwater rearing, R. N. Iwamoto, A. M. Saxton, and W. K. Hershberger, 187.
Genetic, immunological, and gene dosage studies of mitochondrial and cytosolic MDH variants in maize, D. E. McMillin and J. G. Scandalios, 177.
Genetic neighborhood structure of the salt marsh composite, *Borrichia frutescens*, A. E. Antlfinger, 128.
Genetic regulation of murine hepatic arylsulfatase B activity during development, W. L. Daniel, B. W. Harrison, and K. Nelson, 24.
Genetics and cytology of the *ms*$_4$ male-sterile soybean, X. Delannay and R. G. Palmer, 219.
Genetics of the laboratory mouse: a fact book, W. K. Silvers (Rev.), 313; corrigendum, 388.
Genetic studies in diploid and tetraploid *Paspalum* species: embryo sac development, chromosome behavior, and fertility in *P. cromyorrhizon*, *P. laxum*, and *P. proliferum*, C. L. Quarín, W W. Hanna, A. Fernández, 254.
Genetic variation in peroxidase isozymes of *Liriodendron tulipifera* L., D. B. Houston and S. K. Hood, 183.
Genome of the whooping crane, B. M. Biederman, C. C. Lin, E. Kuyt, and R. C. Drewien, 145.
Gerhart, S., et al., The constitutive heterochromatin of porcine chromosomes, 231.
Gilchrist, J. A. and M. E. Sorrells, Inheritance of kernel color in 'Charcoal' wheat, 457.
Ginsberg, L. C. and E. J. Copeland, Major plasma glycoproteins of diabetic and nondiabetic Chinese hamsters, 311.
Gonsalves, D. and R. Provvidenti, Resistance to papaya ringspot virus in *Cucumis metuliferus* and its relationship to resistance to watermelon mosaic virus 1, 239.
Gonsalves, D., et al., Inheritance of resistance to soybean mosaic virus in *Phaseolus vulgaris*, 302.
Granovsky, T. A., et al., Behavior of centrioles in spermatogenesis of the Madagascar hissing cockroach, 408.
Gray, E., Transgeneration analysis of the human sex ratio: the influence of combinations and permutations of sexes of children on family size, 123.
Green, C. A., Cladistic analysis of mosquito chromosome data (*Anopheles* (*Cellia*) Myzomyia), 3.
Griesbach, R. J., et al., Uptake of isolated lily chromsomes by tobacco protoplasts, 151.
Griggs, M. M. and A. E. Squillace, Inheritance of yellow oleoresin in shortleaf and slash pine, 405.
Grossman, M. and E. M. Funkhouser, Bias in estimation of the sampling variance of an estimate of heritability, 139.

Hammond, M., et al., Mutagenic evaluation of two male contraceptives: 5-thio-D-glucose and gossypol acetic acid, 76.
Hammons, R. O., et al., Inheritance of a white-stem peanut, 301.
Hang, A., et al., Interspecific *Hordeum* hybrids, 475.
Hanna, W. W., et al., Genetic studies in diploid and tetraploid *Paspalum* species: embryo sac development, chromosome behavior, and fertility in *P. cromyorrhizon*, *P. laxum*, and *P. proliferum*, 254.
Harrison, B. W., et al., Genetic regulation of murine hepatic arylsulfatase B activity during development, 24.
Hauptli, H., et al., Outcrossing rate in grain amaranths, 71.
Henny, R. J., Inheritance of foliar variegation in two *Dieffenbachia* cultivars, 384.
Heritable para-fluorophenylalanine-induced aneuploidy in maize, P. Banks, E. J. Britten, and D. E. Byth, 465.
Hershberger, W. K., et al., Genetic estimates for length and weight of coho salmon during freshwater rearing, 187.
Heterokaryons among strains of *Neurospora crassa* with different linear growth rates, E. J. Mullaney and K. E. Papa, 245.
Heyne, E. G., et al., Polyhaploid production through anther culture in common wheat, 360.
Hidu, H., et al., Induced triploidy in the soft-shell clam: cytogenetic and allozymic confirmation, 421.
Hilburn, L. R. and K. S. Rai, Genetic analysis of abnormal male sexual development in *Aedes aegypti* and *Ae. mascarensis* backcross progeny, 59.
Hintz, R. L. and T. J. Foose, Inbreeding, mortality, and sex ratio in gaur (*Bos gaurus*) under captivity, 297.
Honma, S. and C. E. Mero, Inheritance of a uniflora mutant in the tomato, 64.
Hood, S. K. and D. B. Houston, Genetic variation in peroxidase isozymes of *Liriodendron tulipifera* L., 183.
Houston, D. B. and S. K. Hood, Genetic variation in perioxidase isozymes of *Liriodendron tulipifera* L., 183.
Hsu, T. C., et al., Behavior of centrioles in spermatogenesis of the Madagascar hissing cockroach, 408.
Huang L., et al., Serum lipoprotein allotypes in inbred strains of rabbits, 286.
Hummel, R. L., et al., Genetic control of self-incompatibility in red-osier dogwood, 308.
Hyperplastic growth in skin grafts of rabbits, C. K. Chai, 304.

Iannuzzi, L. and D. Di Berardino, Detailed description of R-banded bovine chromosomes, 434.
Ideas on heredity among the Australian aborigines and Trobian Islanders, A. F. Corcos, 298.
Improved Giemsa N-banding technique for the identification of barley chromosomes, R. J. Singh and T. Tsuchiya, 227.
Inbreeding, mortality, and sex ratio in gaur (*Bos gaurus*) under captivity, R. L. Hintz and T. J. Foose, 297.
Increase of phenotypic variance in stressful environments, H. Burla and C. E. Taylor, 142.
Induced triploidy in the soft-shell clam: cytogenetic and allozymic confirmation, S. K. Allen, Jr., P. S. Gagnon, and H. Hidu, 421.
Inheritance of a uniflora mutant in the tomato, C. E. Mero and S. Honma, 64.
Inheritance of a white-stem peanut, W. D. Branch, R. O. Hammons, and J. S. Kirby, 301.
Inheritance of color in the pericarp and corolla of the disc florets in sunflower, J. A. Mosjidis, 461.
Inheritance of foliar variegation in two *Dieffenbachia* cultivars, R. J. Henny, 384.
Inheritance of kernel color in 'Charcoal' wheat, J. A. Gilchrist and M. E. Sorrells, 457.
Inheritance of leopard spotting in the Noriker horse, D. P. Sponenberg, 357.
Inheritance of resistance to soybean mosaic virus in *Phaseolus vulgaris*, R. Provvidenti, D. Gonsalves, and P. Ranalli, 302.
Inheritance of resistance to temperature-drought stress in the snap bean, J. C. Bouwkamp and W. L. Summers, 385.
Inheritance of shoulder spotting in the jewel tetra, *Hyphessobrycon callistus*, J. S. Frankel, 310.
Inheritance of starch characteristics in perisperm of *Amaranthus hypochondriacus* L., K. Okuno and S. Sakaguchi, 467.
Inheritance of tannin quantity in sorghum, B. J. Woodruff, R. P. Cantrell, J. D. Axtell, and L. G. Butler, 214.
Inheritance of yellow oleoresin in shortleaf and slash pine, M. M. Griggs and A. E. Squillace, 405.
Interspecific *Hordeum* hybrids, A. B. Schooler, A. Hang, and J. D. Franckowiak, 475.
Isolation of a sex-linked homozygous translocation in *Anopheles albimanus*, P. E. Kaiser, J. A. Seawright, M. Q. Benedict, and S. Narang, 273.
Isolation of nullihaploids from diverse genotypes of *Nicotiana tabacum*, G. A. Moore and G. B. Collins, 192.
Iwamoto, R. N., et al., Genetic estimates for length and weight of coho salmon during freshwater rearing, 187.

Jain, S. K., Quantitative maize genetics (Rev.), 315.
Jain, S. K., et al., Outcrossing rate in grain amaranths, 71.
Jalal, S. M. and C. Korte, 2,4-D induced clastogenicity and elevated rates of sister chromatid exchanges in cultured human lymphocytes, 224.
James, W. H., The sexes of piglets within the uterine horns, 378.
Jauhar, P. P. and W. B. Storey, *Ornithogalum virens:* a useful organism for teaching cytology, 243.
Jones, B. L., et al., Sequences of purothionins and their inheritance in diploid, tetraploid, and hexaploid wheats, 143.
Joyce, E., et al., The constitutive heterochromatin of porcine chromosomes, 231.

Kahler, A. L., et al., Cryptic variability at enzyme loci in three plant species, *Avena barbara*, *Hordeum vulgare*, and *Zea mays*, 86; corrigendum, 388.
Kaiser, P. E., et al., Isolation of a sex-linked homozygous translocation in *Anopheles albimanus*, 273.
Kessler, S., et al., Effects of selection for decreased movement through the *Drosophila* geotaxis maze, 381.
Key Lecture: Parthenogenesis, homozygosity, and cloning in mammals, C. L. Markert, 390.
Khoshoo, T. N., et al., Evolution and improvement of cultivated amaranths: IX. Cytogenetic relationship between the two basic chromosome numbers, 353.
Kilias, G. and S. N. Alahiotis, Mating propensities and variations in enzyme activities in long-term cage populations of *Drosophila melanogaster*, 53.
Kirby, J. S., et al., Inheritance of a white-stem peanut, 301.
Kitagawa, T., et al., Sphingomyelinosis, a new mutation in the mouse: a model of Niemann-Pick disease in humans, 257.
Kohel, R. J., Crinkle-yellow, a new mutant in *Gossypium hirsutum* L., 382.
Kondo, Y., et al., Male urinary protein-1 (MUP-1) in the rat: *Mup-1* assigned to linkage group II, 119.
Kopp, E., et al., Nucleolus organizer regions on chromosomes of the domestic dog, 73; corrigendum, 230.
Korban, S. S., et al., Changes in patterns of inheritance of flowering time of dry beans in different environments, 306.
Korte, C. and S. M. Jalal, 2,4-D induced clastogenicity and elevated rates of sister chromatid exchanges in cultured human lymphocytes, 224.
Kuyt, E., et al., Genome of the whooping crane, 145.

Lam, K.-W., et al., Ascorbate concentration in tissues from normal and buphthalmic rabbits, 109.
Lamoreux, M. L. and J. B. Whitney III, Transposable elements controlling genetic instabilities in mammals, 12.
Laranja—an additional eye color gene in the snow series of *Apis mellifera* L., A. E. E. Soares and J. C. Netto, 80.
Leamy, L.: Morphometric studies in inbred and hybrid house mice: I. Patterns in the mean values, 171; II. Patterns in the variances, 267.
Lee, P.-F., et al., Ascorbate concentration in tissues from normal and buphthalmic rabbits, 109.
Leslie, J. F., Linkage analysis of seventeen loci in poeciliid fish (genus *Poeciliopsis*), 19.
Levine, L., Sexual selection in mice: VI. Effects of fostering, 375.
Levine, L., et al., Effects of selection for decreased movement through the *Drosophila* geotaxis maze, 381.

Human Genetics

Chromosomes: rapid method for identification of constitutive heterochromatin of secondary constriction regions of 1, 9, and 16, 74.
Cultured human lymphocytes: 2,4-D induced clastogenicity and elevated rates of sister chromatid exchanges, 224.
Ideas on heredity among the Australian aborigines and Trobian Islanders, 298.
Pericentric inversion of the Y chromosome—a rare "third" type of heteromorphism, 236.
Sphingomyelinosis, a mutation in mice that is a model of Niemann-Pick disease in humans, 257.
Transgeneration analyses of the human sex ratio: influence of combinations and permutations of sexes of children on family size, 123.

Lewen, R., et al., Ascorbate concentration in tissues from normal and buphthalmic rabbits, 109.
Leyna, H. K., et al., Changes in patterns of inheritance of flowering time of dry beans in different environments, 306.
Liang, G. H., et al., Polyhaploid production through anther culture in common wheat, 360.
Lin, C. C., et al.: Genome of the whooping crane, 145; The constitutive heterochromatin of porcine chromosomes, 231.
Lin, M.-H., et al., Genetic analysis of anther-derived plants of rice, 49.
Linkage analysis of seventeen loci in poeciliid fish (genus *Poeciliopsis*), J. F. Leslie, 19.
Linkage analysis of the transferrin, albumin, and hemoglobin loci in leopard frogs, D. G. Dunlap, 247.
Linkage group composed of three coat color genes and three serum protein loci in horses, L. Andersson and K. Sandberg, 91; corrigendum, 296.
Linkage group III in the malaria vector, *Anopheles stephensi*, K. Akhtar, R. K. Sakai, and R. H. Baker, 473.
Linkage of an IDH locus with sex and two lethals in *Aedes aegypti*, G. P. Wallis and W. J. Tabachnick, 291.
Linkage of two enzyme loci in fishes of the genus *Xiphophorus* (Poeciliidae): guanylate kinase-2 (GUK2) and glyceraldehyde-3-phosphate dehydrogenase-1 (GAPB1) designated as linkage group III, D. C. Morizot and M. J. Siciliano, 163.
Lobato, L., et al., Cytogenetics of the South American akodont rodents (Cricetidae): IX. Chiasmatic sex bivalent in male meiosis of *Akodon mollis*, 149.
Lookhart, G. L., et al., Sequences of purothionins and their inheritance in diploid, tetraploid, and hexaploid wheats, 143.
Lovell, D. P. and M. F. W. Festing, Relationships among colonies of the laboratory rat, 81.
Lyrene, P. M. and J. L. Perry, Production and selection of blueberry polyploids in vitro, 377.

Machado, M., et al., Cytogenetic analysis of the interspecific hybrid *Vigna radiata* × *V. umbellata*, 205.
Maize developmental mutants: embryos unable to form leaf primordia, W. F. Sheridan and M. G. Neuffer, 318.
Major plasma glycoproteins of diabetic and nondiabetic Chinese hamsters, E. J. Copeland and L. C. Ginsberg, 311.
Majumdar, S. K., et al., Mutagenic evaluation of two male contraceptives: 5-thio-D-glucose and gossypol acetic acid, 76.
Mak, A., et al., Sequences of purothionins and their inheritance in diploid, tetraploid, and hexaploid wheats, 143.
Malacrida, A., et al., 6PGD in the housefly: mapping of the *Pgd* locus in linkage group III of *Musca domestica*, 349.
Male urinary protein-1 (MUP-1) in the rat: *Mup-1* assigned to linkage group II, H. Nikaido, J. Yamada, and Y. Kondo, 119.
Malmberg, R. L., et al., Uptake of isolated lily chromosomes by tobacco protoplasts, 151.
Mammalian genetics: mouse and man, P. F. Forsthoefel (Rev.), 83; corrigendum, 230.
Markert, C. L., Parthenogenesis, homozygosity, and cloning in mammals, 390.
Marx, G. A., Argenteum (*Arg*) mutant of *Pisum*: genetic control and breeding behavior, 413.
Mating propensities and variations in enzyme activities in long-term cage populations of *Drosophila melanogaster*, S. N. Alahiotis and G. Kilias, 53.
Mau-Lastovicka, T., et al., Citrus isozymes: genetics and distinguishing nucellar from zygotic seedlings, 335.
Mayr, B. and W. Schleger, Association patterns in cattle chromosomes, 468.
Mayr, B., et al., Nucleolus organizer regions on chromosomes of the domestic dog, 73; corrigendum, 230.
McCoy, J. R., et al., Meiotic chromosomes of the boll weevil, 234.
McMillin, D. E. and J. G. Scandalios, Genetic, immunological, and gene dosage studies of mitochondrial and cytosolic MDH variants in maize, 177.
Mehra, R. C. and T. A. Fogle, Chromosome banding and karyotype analysis in *Phlox drummondii*, 345.
Meiotic chromosomes of the boll weevil, D. Wise, J. E. Wright, and J. R. McCoy, 234.
Meiotic nondisjunction in male Snell dwarf mice, P. J. J. Wauben-Penris and S. C. van Buul-Offers, 365.
Mero, C. E. and S. Honma, Inheritance of a uniflora mutant in the tomato, 64.
Meyer Memorial Medal Awarded to Frederick G. Meyer, 398.
Milani, R., et al., 6PGD in the housefly: mapping of the *Pgd* locus in linkage group III of *Musca domestica*, 349.
Missing upper beak: a new lethal mutation in domestic fowl, F. G. Silversides, M. S. Urrutia, and R. D. Crawford, 295.
Mitsuoka, S., et al., Sphingomyelinosis, a new mutation in the mouse: a model of Niemann-Pick disease in humans, 257.
Mittler, S., Effect of hyperthermia on radiation-induced chromosome loss in female *Drosophila melanogaster*, 451.
Mitton, J. B. and B. A. Pierce, Allozyme heterozygosity and growth in the tiger salamander, *Ambystoma tigrinum*, 250.
Miyawaki, S., et al., Sphingomyelinosis, a new mutation in the mouse: a model of Niemann-Pick disease in humans, 257.
Mode of inheritance of deficient corpus callosum in mice, D. Wahlsten, 281.
Moore, G. A. and G. B. Collins, Isolation of nullihaploids from diverse genotypes of *Nicotiana tabacum*, 192.
Morizot, D. C. and M. J. Siciliano, Linkage of two enzyme loci in fishes of the genus *Xiphophorus* (Poeciliidae): guanylate kinase-2 (GUK2) and glyceraldehyde-3-phosphate dehydrogenase-1 (GAPD1) designated as linkage group III, 163.
Morphometric studies in inbred and hybrid house mice: I. Patterns in the mean values, L. Leamy, 171; II. Patterns in the variances, L. Leamy, 267.
Mosjidis, J. A., Inheritance of color in the pericarp and corolla of the disc florets in sunflower, 461.
Mujeeb-Kazi, A. and R. Rodriguez, Cytogenetics of hybrids of *Elymus canadensis* × *Hordeum vulgare*, 77.
Mullaney, E. J. and K. E. Papa, Heterokaryons among strains of *Neurospora crassa* with different linear growth rates, 245.
Muller, H. J.: A memoir, B. M. Cohen (Rev.), 477.
Multiple genes controlling superoxide dismutase expression in maize, J. A. Baum and J. G. Scandalios, 95.
Mutagenic evaluation of two male contraceptives: 5-thio-D-glucose and gossypol acetic acid, S. K. Majumdar, J. D. Thatcher, E. H. Dennis, A. Cutrone, M. Stockage, and M. Hammond, 76.

Narang, S., et al., Isolation of a sex-linked homozygous translocation in *Anopheles albimanus*, 273.
Nelson, K., et al., Genetic regulation of murine hepatic arylsulfatase B activity during development, 24.
Netto, J. C. and A. E. E. Soares, Laranja—an additional eye color gene in the snow series of *Apis mellifera* L., 80.
Neuffer, M. G. and W. F. Sheridan, Maize developmental mutants: embryos unable to form leaf primordia, 318.
Nguyen, T. C. and T. D. Bunch, Blood group comparisons between European mouflon sheep and North American desert bighorn sheep, 112.
Nguyen-Tan, G.-C. and M. H. Ross, Aberrant egg development from matings of interchange heterozygotes of the German cockroach, 154.
Nicholas, F. W., Simple segregation analysis: a review of its history and terminology, 444.
Nikaido, H., et al., Male urinary protein-1 (MUP-1) in the rat: *Mup-1* assigned to linkage group II, 119.
Nonrandom transmission of the *S* gene in *Nemesia strumosa*, C. D. Robacker and P. D. Ascher, 439.
Nucleolus organizer regions on chromosomes of the domestic dog, E. Kopp, B. Mayr, and W. Schleger, 73, corrigendum, 230.

Okuno, K. and S. Sakaguchi, Inheritance of starch characteristics in perisperm of *Amaranthus hypochondriacus* L., 467.
Oliveira, D., et al., Cytogenetics of the South American akodont rodents (Cricetidae): IX. Chiasmatic sex bivalent in male meiosis of *Akodon mollis*, 149.
Ornithogalum virens: a useful organism for teaching cytology, P. P. Jauhar and W. B. Storey, 243.
Orton, T. J. and M. A. Browers, Transmission of gross chromosomal variability from suspension cultures into regenerated celery plants, 159.
Outcrossing rate in grain amaranths, S. K. Jain, H. Hauptli, and K. R. Vaidya, 71.

Pal, M., et al., Evolution and improvement of cultivated amaranths: IX. Cytogenetic relationship between the two basic chromosome numbers, 353.
Palmer, R. G. and D. M. Stelly, Variable development in anthers of partially male-sterile soybeans, 101.
Palmer, R. G. and X. Delannay, Genetics and cytology of the *ms*$_4$ male-sterile soybean, 219.
Pandey, R. M., et al., Evolution and improvement of cultivated amaranths: IX. Cytogenetic relationship between the two basic chromosome numbers, 353.
Papa, K. E. and E. J. Mullaney, Heterokaryons among strains of *Neurospora crasa* with different linear growth rates, 245.

Parks, C. R. and J. F. Wendel, Genetic control of isozyme variation in *Camellia japonica* L., 197.
Parthenogenesis, homozygosity, and cloning in mammals, C. L. Markert, 390.
Pasupuleti, C. V. and W. C. Galinat, *Zea diploperennis:* I. Its chromosomes and comparative cytology, 168.
Pathak, S., et al., Behavior of centrioles in spermatogenesis of the Madagascar hissing cockroach, 408.
Pellett, H. M., et al., Genetic control of self-incompatibility in red-osier dogwood, 308.
Perinotochordal sheath of heterozygous and homozygous Danforth's short-tail mice, E. M. Center, S. S. Spigelman, and D. B. Wilson, 299.
Perry, J. L. and P. M. Lyrene, Production and selection of blueberry polyploids in vitro, 377.
6PGD in the housefly: mapping of the *Pgd* locus in linkage group III of *Musca domestica*, A. Malacrida, G. Gasperi, and R. Milani, 349.
Pierce, B. A. and J. B. Mitton, Allozyme heterozygosity and growth in the tiger salamander, *Ambystoma tigrinum*, 250.

Plant Genetics

Amaranths: outcrossing rate in grain, 71; cytogenetic relationship between the two basic chromosome numbers, 353; inheritance of starch characteristics in perisperm of *Amaranthus hypochondriacus* L., 467.
Avena barbata: cryptic variability at enzyme loci in three plant species, *A. barbata*, *Hordeum vulgare*, and *Zea mays*, 86; corrigendum, 388.
Barley: an improved Giemsa N-banding technique for the identification of chromosomes, 227.
Beans: inheritance of resistance to soybean mosaic virus in *Phaseolus vulgaris*, 302; changes in patterns of inheritance of flowering time of dry beans in different environments, 306; inheritance of resistance to temperature-drought stress in the snap, 385.
Blueberry: production and selection of polyploids in vitro, 377.
Borrichia frutescens: genetic neighborhood structure of the salt marsh composite, 128.
Camellia japonica L.: genetic control of isozyme variation, 197.
Celery: transmission of gross chromosomal variability from suspension cultures into regenerated plants, 159.
Chives: useful plant for teaching meiosis, 379.
Citrus isozymes: genetics and distinguishing nucellar from zygotic seedlings, 335.
Cotton: crinkle-yellow mutant in *Gossypium hirsutum* L., 382; tester-set of translocations in *Gossypium hirsutum* L., 429.
Cucumis metuliferus: resistance to papaya ringspot virus and its relationship to resistance to watermelon mosaic virus 1, 239.
Dieffenbachia: inheritance of foliar variegation in two cultivars, 384.
Dogwood: genetic control of self-incompatibility in red-osier, 308.
Elymus: Cytogenetics of hybrids of *E. canadensis* × *Hordeum vulgare*, 77.
Hordeum: cytogenetics of hybrids of *Elymus canadensis* × *H. vulgare*, 77; cryptic variability at enzyme loci in, *H. vulgare*, *Avena barbata*, *Zea mays*, 86; corrigendum, 388; interspecific hybrids, 475.
Impatiens: endosperm balance numbers among New Guinea-Indonesian species, 240.
Liriodendron tulipifera L.: genetic variation in peroxidase isozymes, 183.
Maize: transposable elements controlling genetic instabilities, 12; additional mechanism by which B chromosomes are maintained, 29; cryptic variability at enzyme loci in *Zea mays*, *Avena barbata*, and *Hordeum vulgare*, 86; corrigendum, 388; multiple genes controlling superoxide dismutase expression, 95; chromosomes and comparative cytology in *Zea diploperennis*, 168; genetic, immunological, and gene dosage studies of mitochondrial and cytosolic MDH variants, 177; developmental mutants with embryos unable to form leaf primordia, 318; heritable para-fluorophenylalanine-induced aneuploidy, 465; tests establishing the genetic relationship between carotenoid biosynthetic mutants of maize studied in Hungary and the United States, 473.
Nemesia strumosa: nonrandom transmission of *S* gene, 439.
Neurospora crassa: heterokaryons among strains of *N. crassa* with different linear growth rates, 245.
Nicotiana: chromosomes of *N. africana* Merxm, 115; uptake of isolated lily chromosomes by tobacco protoplasts, 151; isolation of nullihaploids from diverse genotypes of *N. tabacum*, 192; cytoplasmic inheritance of tentoxin sensitivity, 264; corrigendum, 388.
Ornithogalum virens: a useful organism for teaching cytology, 243.
Paspalum: embryo sac development, chromosome behavior, and fertility in diploid and tetraploid *P. cromyorrhizon*, *P. laxum*, and *P. proliferum*, 254.
Peanut: inheritance of white-stem, 301.
Phlox drummondii: chromosome banding and karyotype analysis, 345.
Pinus: G-banded chromosomes in *P. resinosa*, 305; inheritance of yellow oleoresin in shortleaf and slash, 405.
Pisum: genetic control and breeding behavior of argenteum (*Arg*) mutant, 413.
Rice: genetic analysis of anther-derived plants, 49.
Sorghum: inheritance of tannin quantity, 214.
Soybeans: variable development in anthers of partially male-sterile plants, 101; cytogenetics of the ms_4 male-sterile, 219.
Sunflower: inheritance of pericarp and corolla color of disc florets, 461.
Tomatoes: uniflora mutant, 64; dwarf curly leaf mutant, 470.
Vigna: cytogenetic analysis of interspecific hybrid *V. radiata* × *V. umbellata*, 205.
Wheat: sequences of purothionins and their inheritance in diploid, tetraploid, and hexaploid plants, 143; polyhaploid production through anther culture, 360; inheritance of 'Charcoal' kernel color, 457.

Polyhaploid production through anther culture in common wheat, G. H. Liang, N. Sangduen, E. G. Heyne, and R. G. Sears, 360.
Popescu, C. P., et al., Collagen substrates for cytogenetic studies of domestic animal embryos, 147.
Pratt, B. M. and R. J. Robbins, Blonde, a new mutation in *Peromyscus maniculatus* affecting fur, skin, and eye pigmentation, 69.
Premeiotic male recombination in *Drosophila melanogaster*, A. A. Dewees, 330.
Production and selection of blueberry polyploids in vitro, P. M. Lyrene and J. L. Perry, 377.
Provvidenti, R. and D. Gonsalves, Resistance to papaya ringspot virus in *Cucumis metuliferus* and its relationship to resistance to watermelon mosaic virus 1, 239.
Provvidenti, R., et al., Inheritance of resistance to soybean mosaic virus in *Phaseolus vulgaris*, 302.

Quantitative maize genetics, S. K. Jain (Rev.), 315.
Quarín, C. L., et al., Genetic studies in diploid and tetraploid *Paspalum* species: embryo sac development, chromosome behavior, and fertility in *P. cromyorrhizon*, *P. laxum*, and *P. proliferum*, 254.

Rai, K. S. and L. R. Hilburn, Genetic analysis of abnormal male sexual development in *Aedes aegypti* and *Ae. mascarensis* backcross progeny, 59.
Ranalli, P., et al., Inheritance of resistance to soybean mosaic virus in *Phaseolus vulgaris*, 302.
Rapid method for identification of constitutive heterochromatin of secondary constriction regions of human chromosomes 1, 9, and 16, R. S. Verma, S. V. Brat, and H. Dosik, 74.
Ray, D. T. and J. E. Endrizzi, A tester-set of translocations in *Gossypium hirsutum* L., 429.
Recent Soviet publications, B. M. Cohen (Rev.), 316.
Reed, S. C.: A survey of identical twins reared apart (Rev.), 315; Updating twin research (Rev.), 477.
Relationships among colonies of the laboratory rat, D. P. Lovell and M. F. W. Festing, 81.
Resistance to papaya ringspot virus in *Cucumis metuliferus* and its relationship to resistance to watermelon mosaic virus 1, R. Provvidenti and D. Gonsalves, 239.
Revised animal genetics text, D. P. Sponenberg (Rev.), 387.
Robacker, C. D. and P. D. Ascher, Nonrandom transmission of the *S* gene in *Nemesia strumosa*, 439.
Robbins, R. J. and B. M. Pratt, Blonde, a new mutation in *Peromyscus maniculatus* affecting fur, skin, and eye pigmentation, 69.
Robertson, D. S. and A. Faludi-Daniel, Tests establishing the genetic relationship between carotenoid biosynthetic mutants of maize studied in Hungary and the United States, 473.
Robinson, A. D., Teaching meiosis with chives, 379.
Rockwell, R. F., et al., Effects of selection for decreased movement through the *Drosophila* geotaxis maze, 381.
Rodriguez, J., et al., The clinical significance of pericentric inversion of the human Y chromosome: a rare "third" type of heteromorphism, 236.
Rodriguez, R. and A. Mujeeb-Kazi, Cytogenetics of hybrids of *Elymus canadensis* × *Hordeum vulgare*, 77.
Ross, M. H. and G.-C. Nguyen-Tan, Aberrant egg development from matings of interchange heterozygotes of the German cockroach, 154.

Sakaguchi, S. and K. Okuno, Inheritance of starch characteristics in perisperm of *amaranthus hypochondriacus* L., 467.
Sakai, R. K., et al., Esterases in the malaria vector mosquito, *Anopheles culicifacies:* genetic and linkage analyses of an alpha and beta polymorphism, 209; Two new body color mutants in the mosquito: the genetics of yellow and green in *Anopheles culicifacies*, 340; Linkage group III in the malaria vector, *Anopheles stephensi*, 473.
Sakiyama, T., et al., Sphingomyelinosis, a new mutation in the mouse: a model of Niemann-Pick disease in humans, 257.
Sandberg, K. and L. Andersson, A linkage group composed of three coat color genes and three serum protein loci in horses, 91; corrigendum, 296.
Sangduen, N., et al., Polyhaploid production through anther culture in common wheat, 360.
Saxton, A. M., et al., Genetic estimates for length and weight of coho salmon during freshwater rearing, 187.
Scandalios, J. G. and D. E. McMillin, Genetic, immunological, and gene dosage studies of mitochondrial and cytosolic MDH variants in maize, 177.
Scandalios, J. G. and J. A. Baum, Multiple genes controlling superoxide dismutase expression in maize, 95.
Schleger, W. and B. Mayr, Association patterns in cattle chromosomes, 468.
Schleger, W., et al., Nucleolus organizer regions on chromosomes of the domestic dog, 73; corrigendum, 230.
Schooler, A. B., et al., Interspecific *Hordeum* hybrids, 475.
Schultz, M. E. and R. J. Schultz, Diethylnitrosamine-induced hepatic tumors in wild vs. inbred strains of a viviparous fish, 43.
Schultz, R. J. and M. E. Schultz, Diethylnitrosamine-induced hepatic tumors in wild vs. inbred strains of a viviparous fish, 43.
Sears, R. G., et al., Polyphaploid production through anther culture in common wheat, 360.
Seawright, J. A., et al., Isolation of a sex-linked homozygous translocation in *Anopheles albimanus*, 273.
Semino, C., et al., Cytogenetics of the South American akodont rodents (Cricetidae): IX. Chiasmatic sex bivalent in male meiosis of *Akodon mollis*, 149.
Sequences of purothionins and their inheritance in diploid, tetraploid, and hexaploid wheats, B. L. Jones, G. L. Lookhart, A. Mak, and D. B. Cooper, 143.
Serum lipoprotein allotypes in inbred strains of rabbits, D. Usher, L. Huang, B. Sorouri, and R. R. Fox, 286.
Sexes of piglets within the uterine horns, W. H. James, 378.
Sexual selection in mice: VI. Effects of fostering, L. Levine, 375.
Sheridan, W. F. and M. G. Neuffer, Maize developmental mutants: embryos unable to form leaf primordia, 318.
Shi, L., et al., The behavior of centrioles in spermatogenesis of the Madagascar hissing cockroach, 408.
Shortess, D. K., A FORTRAN computer program for calculating linkage intensities from F_2 data, 70.
Shumaker, K. M., et al., Cryptic variability at enzyme loci in three plant species, *Avena barbata*, *Hordeum vulgare*, and *Zea mays*, 86; corrigendum, 388.
Siciliano, M. J. and D. C. Morizot, Linkage of two enzyme loci in fishes of the genus *Xiphophorus* (Poeciliidae): guanylate kinase-2 (GUK2) and glyceraldehyde-3-phosphate dehydrogenase-1 (GAPD1) designated as linkage group III, 163.
Siciliano, M. J. and R. L. Stallings, Assignment of ADA, ITPA, AK1, and AK2 to Chinese hamster chromosomes: genetic and structural evidence for the conservation of mammalian autosomal synteny, 399.
Silvers W. K., Genetics of the laboratory mouse: a fact book (Rev.), 313; corrigendum, 388.
Silversides, F. G., et al., Missing upper beak: a new lethal mutation in domestic fowl, 295.
Simple segregation analysis: a review of its history and terminology, F. W. Nicholas, 444.
Singh, R. J. and T. Tsuchiya, An improved Giemsa N-banding technique for the identification of barley chromosomes, 227.
Soares, A. E. E. and J. C. Netto, Laranja—an additional eye color gene in the snow series of *Apis mellifera* L., 80.
Soost, R. K., et al., Citrus isozymes: genetics and distinguishing nucellar from zygotic seedlings, 335.
Sorouri, B., et al., Serum lipoprotein allotypes in inbred strains of rabbits, 286.
Sorrells, M. E. and J. A. Gilchrist, Inheritance of kernel color in 'Charcoal' wheat, 457.
Sphingomyelinosis, a new mutation in the mouse: a model of Niemann-Pick disease in humans, S. Miyawaki, S. Mitsuoka, T. Sakiyama, and T. Kitagawa, 257.
Spigelman, S. S., et al., Perinotochordal sheath of heterozygous and homozygous Danforth's short-tail mice, 299.
Sponenberg, D. P.: The inheritance of leopard spotting in the Noriker horse, 357; Revised animal genetics text (Rev.), 387.
Squillace, A. E. and M. M. Griggs, Inheritance of yellow oleoresin in shortleaf and slash pine, 405.
Stallings, R. L. and M. J. Siciliano, Assignment of ADA, ITPA, AK1, and AK2 to Chinese hamster chromosomes: genetic and structural evidence for the conservation of mammalian autosomal synteny, 399.
Stelly, D. M. and R. G. Palmer, Variable development in anthers of partially male-sterile soybeans, 101.
Stockage, M., et al., Mutagenic evaluation of two male contraceptives: 5-thio-D-glucose and gossypol acetic acid, 76.
Storey, W. B. and P. P. Jauhar, *Ornithogalum virens:* a useful organism for teaching cytology, 243.
Summers, W. L. and J. C. Bouwkamp, Inheritance of resistance to temperature-drought stress in the snap bean, 385.
Survey of identical twins reared apart, S. C. Reed (Rev.), 315.

Tabachnick, W. J. and G. P. Wallis, Linkage of an IDH locus with sex and two lethals in *Aedes aegypti*, 291.
Tai, W., et al., Cytogenetic analysis of the interspecific hybrid *Vigna radiata* × *V. umbellata*, 205.
Taylor, C. E. and H. Burla, Increase of phenotypic variance in stressful environments, 142.
Teaching meiosis with chives, A. D. Robinson, 379.
Tester-set of translocations in *Gossypium hirsutum* L., D. T. Ray and J. E. Endrizzi, 429.
Tests establishing the genetic relationship between carotenoid biosynthetic mutants of maize studied in Hungary and the United States, D. S. Robertson and A. Faludi-Daniel, 473.
Thatcher, J. D., et al., Mutagenic evaluation of two male contraceptives: 5-thio-D-glucose and gossypol acetic acid, 76.
Torres, A. M., et al., Citrus isozymes: genetics and distinguishing nucellar from zygotic seedlings, 335.
Transgeneration analyses of the human sex ratio: the influence of combinations and permutations of sexes of children on family size, E. Gray, 123.
Transmission of gross chromosomal variability from suspension cultures into regenerated celery plants, M. A. Browers and T. J. Orton, 159.
Transposable elements controlling genetic instabilities in mammals, J. B. Whitney III and M. L. Lamoreux, 12.
Tsuchiya, T. and R. J. Singh, An improved Giemsa N-banding technique for the identification of barley chromosomes, 227.
Two new body color mutants in the mosquito: the genetics of yellow and green in *Anopheles culicifacies*, C. J. Dubash, R. K. Sakai, and R. H. Baker, 340.

Updating twin research (Rev.), S. C. Reed, 477.
Uptake of isolated lily chromosomes by tobacco protoplasts, R. J. Griesbach, R. L. Malmberg, and P. S. Carlson, 151.
Urrutia, M. S., et al., Missing upper beak: a new lethal mutation in domestic fowl, 295.
Usher, D., et al., Serum lipoprotein allotypes in inbred strains of rabbits, 286.

Vaidya, K. R., et al., Outcrossing rate in grain amaranths, 71.
van Buul-Offers, S. C. and P. J. J. Wauben-Penris, Meiotic nondisjunction in male Snell dwarf mice, 365.
Variable development in anthers of partially male-sterile soybeans, D. M. Stelly and R. G. Palmer, 101.
Verma, R. S., Chromosome banding techniques (Rev.), 387.
Verma, R. S., et al.: A rapid method for identification of constitutive heterochromatin of secondary constriction regions of human chromosomes 1, 9, and 16, 74; The clinical significance of pericentric inversion of the human Y chromosome: a rare "third" type of heteromorphism, 236.
Vitamin A, beta carotene, and hereditary buphthalmus in the rabbit, R. R. Fox, H. D. Eaton, and D. D. Crary, 370.

Wahlsten, D., Mode of inheritance of deficient corpus callosum in mice, 281.
Wallace, B., *Drosophila melanogaster* populations selected for resistance to NaCl and $CuSO_4$ in both allopatry and sympatry, 35.
Wallis, G. P. and W. J. Tabachnick, Linkage of an IDH locus with sex and two lethals in *Aedes aegypti*, 291.
Wauben-Penris, P. J. J. and S. C. van Buul-Offers, Meiotic nondisjunction in male Snell dwarf mice, 365.

Wendel, J. F. and C. R. Parks, Genetic control of isozyme variation in *Camellia japonica* L., 197.
Whitney III, J. B. and M. L. Lamoreux, Transposable elements controlling genetic instabilities in mammals, 12.
Wilson, D. B., et al., Perinotochordal sheath of heterozygous and homozygous Danforth's short-tail mice, 299.
Wise, D., et al., Meiotic chromosomes of the boll weevil, 234.
Womack, J. E., Design and analysis of breeding experiments (Rev.), 83.
Woodruff, B. J., et al., Inheritance of tannin quantity in sorghum, 214.
Wright, J. E., et al., Meiotic chromosomes of the boll weevil, 234.

Yamada, J., et al., Male urinary protein-1 (MUP-1) in the rat: *Mup-1* assigned to linkage group II, 119.
Yao, K. T. S., Cytogenetic consequences of microwave irradiation on mammalian cells incubated in vitro, 133.
Yu, M. H., The dwarf curly leaf tomato mutant, 470.

Zea diploperennis: I. Its chromosomes and comparative cytology, C. V. Pasupuleti and W. C. Galinat, 168.